## COASTAL IMPACT ASSISTANCE PROGRAM (CIAP) PROJECT NOMINEE FACT SHEET

## 1). Project Title:

South Lake DeCade Freshwater Introduction and Shoreline Protection Project

## 2). Entity/Individual Nominating Project:

Terrebonne Parish Consolidated Government

## 3). Contact Information:

Mr. Al Levron
Director of Public Works
Terrebonne Parish Consolidated Government
P.O. Box 2768
8026 Main Street
Houma, LA 70361
(985) 873-6405
(985) 873-6409 (fax)
allevron@tpcg.org

## 4). Total State CIAP Funds Requested:

Total CIAP Funds Requested: \$5.8 million

## 5). Infrastructure Funds Proposed:

There are \$0 infrastructure funds proposed for this project.

## 6). Description and Location of Project:

The proposed project area is located in the Terrebonne Basin of CWPPRA Region 3, Terrebonne Parish, Sections 25 & 26, T19S – R15E, approximately 15 miles southwest of Houma, Louisiana. Project components include installation of three control structures along the south rim of Lake DeCade and enlarging Lapeyrouse Canal to allow the controlled diversion of Atchafalaya River water, nutrients and sediments south into project areas marshes. Outfall management structures are planned in the marsh interior to provide better distribution of river water. Approximately 1.6 miles of foreshore rock dike is planned to protect the critical areas of the south lake shoreline from breaching.

## 7). Project Type: Type 1, 2 & 4

The South Lake DeCade Freshwater Introduction and Shoreline Protection Project will be implemented for the conservation, restoration and protection of coastal areas including wetlands; to mitigate damage to fish, wildlife and natural resources; and the implementation of a federally approved marine, coastal or conservation management plan. Specifically, action plans EM-6

(Shoreline Stabilization) and EM-2 (Freshwater and Sediment Diversions) of the Barataria-Terrebonne National Estuary Program (BTNEP).

## 8). Project Justification:

The project area is experiencing marsh deterioration due to subsidence, rapid tidal exchange and human induced hydrologic changes that result in increased salinities. Saltwater intrusion has caused a shift in marsh type and a conversion of over 30 percent of emergent vegetation to open water habitat. Shoreline erosion along the south embankment of Lake DeCade threatens to breach the hydrologic barrier between the lake and interior marshes.

The proposed project components include the installation of three control structures along the south rim the Lake DeCade and enlarging Lapeyrouse Canal to allow the controlled diversion of Atchafalaya River water, sediments and nutrients south into the marshes of the project area. Outfall management structures are planned in the marsh interior to provide better distribution of river water.

## **Preliminary Project Benefits**

- The project area encompasses over 1,600 acres. It is anticipated that the project will create approximately 200 acres. This project will provide no benefits to critical or non-critical infrastructure; however, it project will compliment the Penchant Basin Plan Project and the North Lake Mechant Landbridge Restoration Project.
- 2) There is only one landowner, Apache Minerals, Inc.

## **Preliminary Estimated Construction Costs:**

\$5,800,000.00

## Coast 2050 Strategy:

This project was nominated and developed under the CWPPRA PPL Number 9. Phase II (construction) funding was requested in December 2005, but the project was not selected. This project meets the following Coast 2050 strategies:

Restore/prevent adverse tidal exchange points between lake/marsh Protect and Maintain Ridge Function

In addition, the project also meets the restoration goals identified by the Strategic Plan for Coastal Restoration adopted by the Terrebonne Parish Coastal Zone Management and Restoration Advisory Committee and supported by the Terrebonne Parish Council, as well as the goals and objectives of the specifically mentioned action plans of the BTNEP.

## 9). Project Cost Share:

The project cost share is unknown at this time.

#### Attachments

1. CWPPRA Project Nomination Fact Sheet - NRCS

October 2003



# South Lake De Cade Freshwater Introduction (TE-39)

## **Project Status**

Approved Date: 2000 Project Area: 7,343 acres
Approved Funds: \$495,611 Total Est. Cost: \$5.8 M

Net Benefit After 20 Years: 201 acres

Status: Engineering and Design

Project Type: Freshwater Diversion and Shoreline

Protection

### Location

The project is located in Terrebonne Parish, approximately 15 miles southwest of Houma, Louisiana.

#### Problems

The project area is experiencing marsh deterioration due to subsidence, rapid tidal exchange, and human-induced hydrologic changes that result in increased salinities. Saltwater intrusion has caused a shift in marsh type and a conversion of over 30 percent of emergent vegetation to open water habitat. Shoreline erosion along the south embankment of Lake De Cade threatens to breach the hydrologic barrier between the lake and interior marshes.

#### Restoration Strategy

Proposed project components include installing three control structures along the south rim of the lake and enlarging Lapeyrouse Canal to allow the controlled diversion of Atchafalaya River water, nutrients, and sediments south into project area marshes. Outfall management structures are planned in the marsh interior to provide better distribution of river water. In addition, approximately 1.6 miles of foreshore rock dike is planned to protect the critical areas of the south lake shoreline from breaching.



Lapeyrouse Canal will function as one of three freshwater introduction sites along the south rim of Lake De Cade after obstructions are removed and the canal reinforced.

#### Progress to Date

After initial engineer investigation the project was divided into two construction units. Construction unit one will consist of the shoreline protection components. The other will be freshwater introduction components. Engineering and design has begun on the shoreline protection components of the project. Data gathering and analysis is being conducted on the freshwater diversion aspects of the project.

This project is on Priority Project List 9.

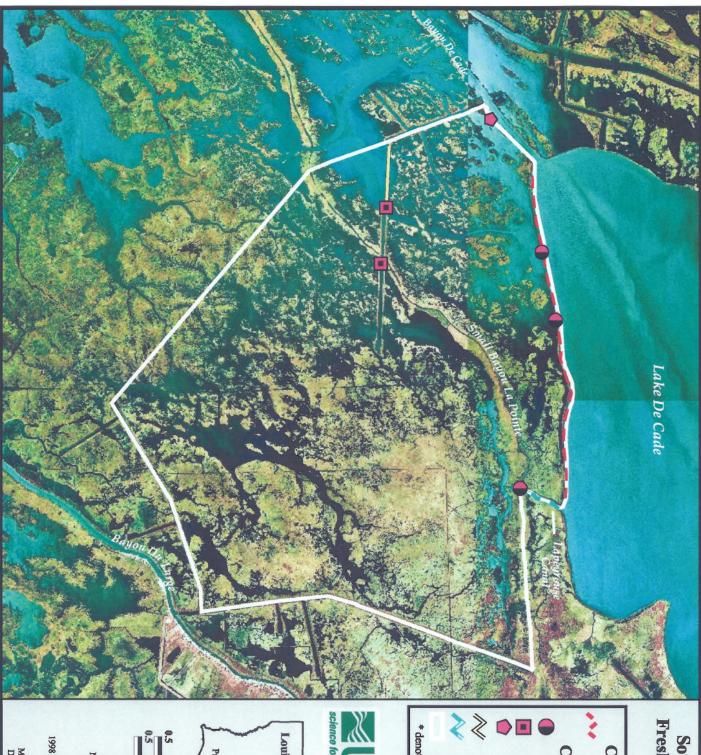
For more project information, please contact:



Federal Sponsor: Natural Resources Conservation Service Alexandria, LA (318) 473-7756



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



# **Freshwater Introduction** South Lake De Cade (TE-39)

**Construction Unit 1 Shoreline Protection \*** 

**Construction Unit 2** 

Freshwater Introduction \*

Weir \* Plug \*

Containment Dike \*

Dredge Channel \* **Project Boundary** 

\* denotes proposed features







Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

0.5 Miles

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangle Map Date: October 1, 2003

Map ID: USGS-NWRC 2003-11-067

Data accurate as of: October 1, 2003